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=> fil reg
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L3                  STR
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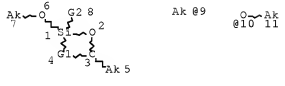


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GGCAT   IS SAT  AT   5
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GGCAT   IS SAT  AT   9
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED     603 ITERATIONS                          21 ANSWERS
SEARCH TIME: 00.00.01


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L1             1 S E3
                SEL RN

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L2             5 S E1-5

     FILE 'LREGISTRY' ENTERED AT 09:28:55 ON 19 NOV 2007
L3               STR

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L4             1 S L3
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L6             2 S L2 AND L5
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L7            11 S L5

     FILE 'CAOLD' ENTERED AT 09:36:50 ON 19 NOV 2007
L8             0 S L5


=> fil hcap
FILE 'HCAPLUS' ENTERED AT 09:38:02 ON 19 NOV 2007
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FILE LAST UPDATED: 18 Nov 2007  (20071118/ED)

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 substance identification.

=> d l7 ibib abs hitstr hitind 1-11

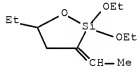
L7   ANSWER 1 OF 11  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2005:1250858  HCAPLUS  Full-text
DOCUMENT NUMBER:          144:129033
TITLE:                    Alkyne Hydrosilylation Catalyzed by a Cationic
                          Ruthenium Complex: Efficient and General Trans
```

Addition
AUTHOR(S): Trost, Barry M.; Ball, Zachary T.
CORPORATE SOURCE: Department of Chemistry, Stanford University, Stanford, CA, 94305-5080, USA
SOURCE: Journal of the American Chemical Society (2005), 127(50), 17644-17655
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:129033

AB Hydrosilylation of 1-alkynes catalyzed by ruthenium cationic acetonitrile cyclopentadienyl half-sandwich complexes afforded α-substituted vinylsilanes; propargyl alcs. were converted to silylated allyl alcs. and β-hydroxyketones. The complex [Cp*Ru(MeCN)3]PF6 is shown to catalyze the hydrosilylation of a wide range of alkynes. Terminal alkynes afford access to α-vinylsilane products with good regioselectivity. Deuterium labeling studies indicate a clean trans addition process is at work. The same complex is active in internal alkyne hydrosilylation, where absolute selectivity for the trans addition process is maintained. Several internal alkyne substrate classes, including propargylic alcs. and α,β-alkynyl carbonyl compds., allow regioselective vinylsilane formation. The tolerance of a wide range of silanes is noteworthy, including alkyl-, aryl-, alkoxy-, and halosilanes. This advantage is demonstrated in the direct synthesis of triene substrates for silicon-tethered intramol. Diels-Alder cycloaddns.

IT 392700-16-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(regioselective hydrosilylation of alkynes, acetylenic alcs. and carbonyl compds. catalyzed by ruthenium cationic half-sandwich complexes)

RN 392700-16-2 HCAPLUS
CN 1-Oxa-2-silacyclopentane, 2,2-diethoxy-5-ethyl-3-ethylidene- (CA INDEX NAME)



CC 29-6 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 23

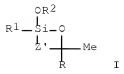
IT 108191-41-9P 193006-92-7P 219736-38-6P, 3,10-Tridecadiyne-1,13-diol 392700-04-8P 392700-08-2P 392700-10-6P 392700-12-8P 392700-14-0P 392700-16-2P 392700-20-8P 392700-21-9P 392700-22-0P 392700-23-1P 392700-25-3P 392700-26-4P 392700-35-5P 447442-15-1P 489469-17-2P 556776-84-2P 556776-85-3P 556776-86-4P 556776-95-5P 609306-86-7P 609307-02-0P 609307-03-1P 609307-04-2P 609307-07-5P 797762-55-1P 797762-62-0P 797762-63-1P 797762-65-3P 797762-66-4P 797762-69-7P 797762-71-1P 869206-60-0P 873450-70-5P 873450-73-8P 873450-81-8P 873450-82-9P 873450-83-0P 873450-84-1P 873450-86-3P 873450-91-0P 873450-92-1P 873450-93-2P 873562-43-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(regioselective hydrosilylation of alkynes, acetylenic alcs. and

carbonyl compds. catalyzed by ruthenium cationic half-sandwich complexes)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:429420 HCAPLUS Full-text
DOCUMENT NUMBER: 142:464454
TITLE: Preparation of oxa-silacyclopentane type cyclic silicone compound in single step reaction for organic silicone resin having alcoholic hydroxyl group with good long-term stability
INVENTOR(S): Komuro, Katsuhiko; Suzuki, Hiroshi
PATENT ASSIGNEE(S): Toagosei Co., Ltd., Japan
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005044828	A1	20050519	WO 2004-JP16445	200411 05
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2007055036	A1	20070308	US 2006-577948	200609 11
PRIORITY APPLN. INFO.:			JP 2003-377752	A 200311 07
			JP 2004-39063	A 200402 16
			WO 2004-JP16445	W 200411 05

OTHER SOURCE(S): MARPAT 142:464454
GI



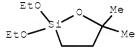
I

AB A cyclic organic silicone compound I is produced by reacting an olefin ZRC(OH)CH3 and an alkoxysilane R1SiH(OR2)2 in the presence of a transition metal catalyst and an organic silicone resin having an alc. hydroxyl group is obtained by hydrolyzing and condensing the organic silicone compound I or a mixture of the organic silicone compound and a multifunctional alkoxysilane, wherein Z = C2-5 terminal alkenyl; R = Me or H; R1 = C1-3 alkyl or alkoxyl group; R2 = C1-3 alkyl group; and Z' = C2-5 alkylene group. Thus, 348 mmol 3-hydroxy-3-methyl-1- butene and 383 mmol triethoxysilane were reacted in the presence of divinyldisiloxane platinum complex to give a cyclic silicone compound with yield 82% and b.p. 117-120° at 13,300 Pa, 240 mmol of which was condensed with 441 mmol methyltriethoxysilane and 120 mmol hexamethyldisiloxane to give an alc. hydroxy-containing silicone resin, showing good long term stability.

IT 851667-88-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of cyclic organic silicone compds. for organic silicone resin having alc. hydroxyl group with good long-term stability)

RN 851667-88-4 HCAPLUS

CN 1-Oxa-2-silacyclopentane, 2,2-diethoxy-5,5-dimethyl- (CA INDEX NAME)



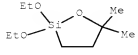
IT 851667-89-5DP, trimethylsilyl-terminated
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of cyclic organic silicone compds. for organic silicone resin having alc. hydroxyl group with good long-term stability)

RN 851667-89-5 HCAPLUS

CN 1-Oxa-2-silacyclopentane, 2,2-diethoxy-5,5-dimethyl-, polymer with triethoxymethylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 851667-88-4
CMF C9 H20 O3 Si



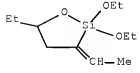
CM 2

CRN 2031-67-6
CMF C7 H18 O3 Si

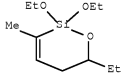
IC ICM C07F007-18
ICS C08G077-14
CC 37-3 (Plastics Manufacture and Processing)
IT 851667-88-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of cyclic organic silicone compds. for organic silicone resin having alc. hydroxyl group with good long-term stability)
IT 107-46-0DP, Hexamethyldisiloxane, reaction products with polysiloxane-silsesquioxanes 851667-89-5DP, trimethylsilyl-terminated
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of cyclic organic silicone compds. for organic silicone resin having alc. hydroxyl group with good long-term stability)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:847179 HCAPLUS Full-text
DOCUMENT NUMBER: 136:134826
TITLE: Markovnikov Alkyne Hydrosilylation Catalyzed by Ruthenium Complexes
AUTHOR(S): Trost, Barry M.; Ball, Zachary T.
CORPORATE SOURCE: Department of Chemistry, Stanford University, Stanford, CA, 94305-5080, USA
SOURCE: Journal of the American Chemical Society (2001), 123(50), 12726-12727
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:134826
AB The first general nondirected terminal alkyne hydrometalation to afford 1,1-disubstituted vinylsilanes with high regioselectivity is presented. Thus, 5-acetyloxy-1-pentyne is hydrosilylated with (OEt)3SiH in the presence of [Cp*Ru(MeCN)3]+[PF6]- to give 86% 5-acetyloxy-2-(triethoxysilyl)-1-pentene, (I). The catalyst system extends to internal alkynes to give a single olefin geometry from an unusual trans addition The mild conditions and functional group tolerance- and the inclusion of alkoxysilanes-open a host of potential subsequent transformations toward the construction of complex target mols. For example, I readily couples with 3-iodoanisole in the presence of [(allyl)PdCl]2 to give 73% 5-acetyloxy-2-(3-methoxybenzene)-1-pentene.
IT 392700-16-2P 392700-32-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 392700-16-2 HCAPLUS
CN 1-Oxa-2-silacyclopentane, 2,2-diethoxy-5-ethyl-3-ethylidene- (CA INDEX NAME)



RN 392700-32-2 HCAPLUS
CN 1-Oxa-2-silacyclohex-3-ene, 2,2-diethoxy-6-ethyl-3-methyl- (CA INDEX NAME)



CC 29-6 (Organometallic and Organometalloidal Compounds)
IT 392700-04-8P 392700-06-0P 392700-10-6P 392700-12-8P
392700-14-0P, 8-(Triethylsilyl)-8-nonenoic acid 392700-16-2P
392700-17-3P 392700-18-4P 392700-19-5P 392700-20-8P,
2-(Triethoxysilyl)-1-tetradecen-3-ol 392700-22-0P, (Z)-Ethyl
3-(triethoxysilyl)-2-pentenoate 392700-23-1P 392700-24-2P,
10-(Triethoxysilyl)-10-undecen-3-yn-1-ol 392700-25-3P,
(Z)-2-(Triethoxysilyl)-2-tetradecene 392700-26-4P,
(Z)-3-(Triethoxysilyl)-2-tetradecene 392700-27-5P 392700-28-6P
392700-29-7P 392700-30-0P 392700-31-1P 392700-32-2P
392700-33-3P 392700-34-4P 392700-35-5P, 1-Bromo-2-[3-(triethoxysilyl)-3-butenyl]benzene 392700-36-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:422005 HCAPLUS Full-text
DOCUMENT NUMBER: 133:164180
TITLE: Functionalization of alkylalkoxysilanes. Studies towards annulations of diterpenoids
AUTHOR(S): Harris, Paul W. R.; Woodgate, Paul D.
CORPORATE SOURCE: Department of Chemistry, The University of Auckland, Auckland, N. Z.
SOURCE: Tetrahedron (2000), 56(24), 4001-4015
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:164180

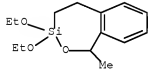
AB Ortho-(2-triethoxysilylethyl) derivs. of aryl ketones undergo oxidative desilylation with H2O2. Tetralone derivs. have served as model substrates for 14-2-(triethoxysilylethyl)-7-oxopodocarpanes, which have been converted into 2-arylethanols in a four-step sequence (BH3·BMS, H2O2, Et3SiH/CF3COOH, TBAF) without isolation of intermediate products (oxasilepin, diol, trifluoroacetate). Use of the 14-(2-diethoxysilylmethyl) analog improved the overall yield significantly (75 vs. 40%). Re-oxidation of ring B with CAN gave the Δ5-7-oxo derivative, which was converted into an enone-aldehyde by treatment with Collins' reagent. The conjugated alkene was reduced stereoselectively with SmI2, which, however, did not promote pinacol coupling of the resulting 1,5-keto aldehyde.

IT 287919-15-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(annulations of arenes via functionalization of alkylalkoxysilanes)

RN 287919-15-7 HCAPLUS

CN 2,3-Benzoxasilepin, 3,3-diethoxy-1,3,4,5-tetrahydro-1-methyl- (CA INDEX NAME)



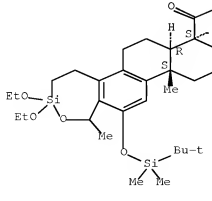
IT 287919-41-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(annulations of diterpenoids via functionalization of alkylalkoxysilanes)

RN 287919-41-9 HCAPLUS

CN Phenanthro[1,2-e][1,2]oxasilepin-8-carboxylic acid, 13-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,3-diethoxy-1,3,4,5,6,7,7a,8,9,10,11,11a-dodecahydro-1,8,11a-trimethyl-, methyl ester, (7aR,8S,11aS)- (CA INDEX NAME)

Absolute stereochemistry.

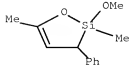


CC 30-20 (Terpenes and Terpenoids)

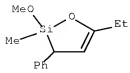
IT 287919-11-3P 287919-12-4P 287919-13-5P 287919-14-6P

287919-19-7P 287919-22-6P 287919-24-8P 287919-25-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(annulations of arenes via functionalization of alkylalkoxysilanes)
IT 142452-78-6P 287919-17-9P 287919-21-5P 287919-26-0P
287919-30-6P 287919-31-7P 287919-35-1P 287919-38-4P
287919-41-9P 287919-44-2P 287919-45-3P 287919-46-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(annulations of diterpenoids via functionalization of alkylalkoxysilanes)
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

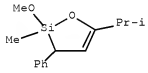
L7 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:176869 HCAPLUS Full-text
DOCUMENT NUMBER: 128:257472
TITLE: Cycloaddition of thermolytically generated methoxymethylsilylene to α,β-unsaturated ketones and imines
AUTHOR(S): Gehrhus, Barbara; Heinicke, Joachim; Meinel, Susanne
CORPORATE SOURCE: Institut fur Anorganische Chemie, Ernst-Moritz-Arndt-Universitat Greifswald, Greifswald, D-17487, Germany
SOURCE: Main Group Metal Chemistry (1998), 21(2), 99-104
CODEN: MGMCE8; ISSN: 0792-1241
PUBLISHER: Freund Publishing House Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Co-thermolyzes of 1,2-dimethyl-1,1,2,2-tetramethoxydisilane (1) with 1,4-diheterodienes proceed with unsym. decay of 1 and formal [1+4]-cycloaddn. of methoxymethylsilylene to give, e.g., a 1-methoxy-1-methyl-1,3,2-dioxasilacyclopentene or a 1,3,2-diazasilacyclopentene. Co-thermolytic conversions of 1 with unsatd. ketones or imines, however, afford mixts. of double bond isomers, 1-oxa- or 1-aza-2-silacyclopent-4-enes and 1-oxa- or 1-aza-2-silacyclopent-3-enes, resp. The 4-ene isomers are the major products in case of oxa- and N-alkyl-azasilacyclopentenes, the 3-ene isomers dominate in a N-phenyl-azasilacyclopentene. The results can be explained by stepwise cycloaddns. of intermediate methoxymethylsilylene via transient oxa- or azasiliranes.
IT 158172-38-4P 205241-04-9P 205241-05-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(cycloaddn. of thermolytically generated methoxymethylsilylene to α,β-unsatd. ketones and imines)
RN 158172-38-4 HCAPLUS
CN 1-Oxa-2-silacyclopent-4-ene, 2-methoxy-2,5-dimethyl-3-phenyl- (CA INDEX NAME)



RN 205241-04-9 HCAPLUS
CN 1-Oxa-2-silacyclopent-4-ene, 5-ethyl-2-methoxy-2-methyl-3-phenyl- (CA INDEX NAME)

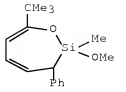


RN 205241-05-0 HCAPLUS
CN 1-Oxa-2-silacyclopent-4-ene, 2-methoxy-2-methyl-5-(1-methylethyl)-3-phenyl- (CA INDEX NAME)

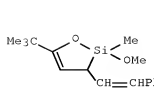


CC 29-6 (Organometallic and Organometalloidal Compounds)
IT 158172-38-4P 158172-39-5P 205241-02-7P 205241-03-8P 205241-04-9P 205241-05-0P 205241-06-1P 205241-07-2P 205241-08-3P 205241-09-4P 205241-10-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(cycloaddn. of thermolytically generated methoxymethylsilylene to α,β-unsatd. ketones and imines)
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

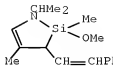
L7 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:81130 HCAPLUS Full-text
DOCUMENT NUMBER: 124:261125
TITLE: Methoxymethylsilylene: (1+6)- and (1+4)-cycloadditions to heterotrienes
AUTHOR(S): Heinicke, Joachim W.; Gehrhus, Barbara
CORPORATE SOURCE: Institute Inorganic Chemistry, University Greifswald, Greifswald, D-17487, Germany
SOURCE: Heteroatom Chemistry (1995), 6(5), 461-8
CODEN: HETCE8; ISSN: 1042-7163
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II



III

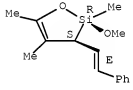
AB Co-pyrolytic gas phase reactions of 1,2-dimethyl-1,1,2,2- tetramethoxydisilane with conjugated 1-oxatrienes in a flow-reactor furnish, via intermediate methoxymethylsilylene, mixts. of diastereoisomers of 3-phenyl-1-oxa-2-silacyclohepta-4,6-dienes, e.g., I, and 3-styryl-1-oxa-2-silacyclopent-4-enes, e.g., II, usually including smaller amts. of the corresponding 1-oxa-2-silacyclopent-3-ene isomers. In co-pyrolysis with an analogous N-isopropylazatriene, five-membered rings, e.g., III, were formed preferentially, and seven-membered isomers could not be detected by NMR spectroscopy.

IT 174870-68-9P 174870-70-3P 174870-71-4P
174870-72-5P 174870-74-7P 174870-75-8P
174956-09-3P 174956-11-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 174870-68-9 HCAPLUS

CN 1-Oxa-2-silacyclopent-4-ene, 2-methoxy-2,4,5-trimethyl-3-(2-phenylethenyl)-, [2α,3α(E)]- (9CI) (CA INDEX NAME)

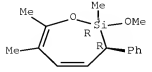
Relative stereochemistry.
Double bond geometry as shown.



RN 174870-70-3 HCAPLUS

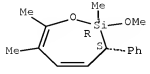
CN 1-Oxa-2-silacyclohepta-4,6-diene, 2-methoxy-2,6,7-trimethyl-3-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



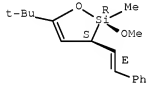
RN 174870-71-4 HCAPLUS
CN 1-Oxa-2-silacyclohepta-4,6-diene, 2-methoxy-2,6,7-trimethyl-3-phenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



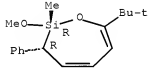
RN 174870-72-5 HCAPLUS
CN 1-Oxa-2-silacyclopent-4-ene, 5-(1,1-dimethylethyl)-2-methoxy-2-methyl-3-(2-phenylethenyl)-, [2α,3α(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



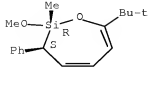
RN 174870-74-7 HCAPLUS
CN 1-Oxa-2-silacyclohepta-4,6-diene, 7-(1,1-dimethylethyl)-2-methoxy-2-methyl-3-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



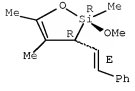
RN 174870-75-8 HCAPLUS
CN 1-Oxa-2-silacyclohepta-4,6-diene, 7-(1,1-dimethylethyl)-2-methoxy-2-methyl-3-phenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



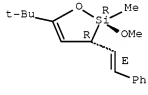
RN 174956-09-3 HCAPLUS
CN 1-Oxa-2-silacyclopent-4-ene, 2-methoxy-2,4,5-trimethyl-3-(2-phenylethenyl)-, [2α,3β(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



RN 174956-11-7 HCAPLUS
CN 1-Oxa-2-silacyclopent-4-ene, 5-(1,1-dimethylethyl)-2-methoxy-2-methyl-3-(2-phenylethenyl)-, [2α,3β(E)]- (9CI) (CA INDEX NAME)

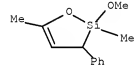
Relative stereochemistry.
Double bond geometry as shown.



CC 29-6 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 22
IT 174870-64-5P 174870-65-6P 174870-66-7P 174870-67-8P
174870-68-9P 174870-69-0P 174870-70-3P
174870-71-4P 174870-72-5P 174870-73-6P
174870-74-7P 174870-75-8P 174870-76-9P
174870-77-0P 174956-07-1P 174956-08-2P 174956-09-3P
174956-10-6P 174956-11-7P 174956-12-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

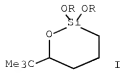
L7 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:605453 HCAPLUS Full-text
DOCUMENT NUMBER: 121:205453
TITLE: Synthesis and reactivity of functional 1-methyl-silacyclopentenes
AUTHOR(S): Heinicke, J.; Gehrhus, B.; Meinel, S.
CORPORATE SOURCE: Institut fuer Anorganische Chemie, EMA-Universitaet Greifswald, Soldtmannstr. 16, Greifswald, D-17489, Germany
SOURCE: Journal of Organometallic Chemistry (1994), 474(1-2), 71-82
CODEN: JORCAI; ISSN: 0022-328X
DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 121:205453
AB The silylenes MeSiCl, MeSiOMe and MeSiNMe2 can be thermally generated from disilanes and trapped by butadiene, isoprene and 2,3-dimethylbutadiene to give functionally-substituted silacyclopentenes. Some examples of cycloaddns. to heterodienes are included to demonstrate the scope and mechanism of the reaction. The reactivity of 1-chloro-1-methyl-silacyclopent-3-ene has been studied.
IT 158172-38-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 158172-38-4 HCAPLUS
CN 1-Oxa-2-silacyclopent-4-ene, 2-methoxy-2,5-dimethyl-3-phenyl- (CA INDEX NAME)



CC 29-6 (Organometallic and Organometalloidal Compounds)
IT 100-40-3P, 4-Vinylcyclohexene 15983-92-3P 16054-12-9P
24429-72-9P 24429-79-6P 50694-31-0P 50694-33-2P 50694-36-5P
55544-25-7P 73357-64-9P 119820-51-8P 119820-52-9P
158172-19-1P 158172-20-4P 158172-21-5P 158172-22-6P
158172-23-7P 158172-24-8P 158172-25-9P 158172-26-0P
158172-27-1P 158172-28-2P 158172-29-3P 158172-30-6P
158172-31-7P 158172-32-8P 158172-33-9P 158172-34-0P
158172-35-1P 158172-36-2P 158172-37-3P 158172-38-4P
158172-39-5P 158172-40-8P 158172-41-9P 158172-42-0P
158172-43-1P 158172-44-2P 158172-45-3P 158172-46-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L7 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:6591 HCAPLUS Full-text
DOCUMENT NUMBER: 114:6591
TITLE: Silicon functionalized silyl enol ethers. 4. Effects of variations of alkoxy substituents upon cyclizations of dialkoxy-2-chloroethylsilyl enol ethers to form 2,2-dialkoxy-1-oxa-2-silacyclohexanes
AUTHOR(S): Walkup, Robert D.; Obeyesekere, Nihal U.; Kane, Robert R.
CORPORATE SOURCE: Dep. Chem. Biochem., Texas Tech. Univ., Lubbock, TX, 79409-1061, USA
SOURCE: Chemistry Letters (1990), (7), 1055-8
CODEN: CMLTAG; ISSN: 0366-7022
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 114:6591
GI

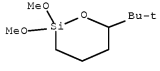


AB Various dialkoxychloroethylsilyl enol ether derivs. of pinacolone Me3CC(:CH2)OSi(OR)2CH2CH2Cl [R = Me, Et, (OR)2 = MeCHOCH2CHOMe, Me2COCH2CHOMe, Me2COCH2COMe2], prepared by lithiation of pinacolone with LiN(CHMe2)2 in Et2O, silylation with C13SiCH2CH2Cl followed by alkoxylation, upon treatment with Bu3SnH and AIBN, underwent free-radical cyclizations to yield isolable 2,2-dialkoxy-1-oxa-2- silacyclohexanes I. As the bulkiness of the alkoxy groups increased, the selectivity of the reaction for forming cyclized instead of directly reduced acyclic byproducts improved.

IT 130891-57-5P 130891-58-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

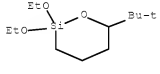
RN 130891-57-5 HCAPLUS

CN 1-Oxa-2-silacyclohexane, 6-(1,1-dimethylethyl)-2,2-dimethoxy- (CA INDEX NAME)



RN 130891-58-6 HCAPLUS

CN 1-Oxa-2-silacyclohexane, 6-(1,1-dimethylethyl)-2,2-diethoxy- (CA INDEX NAME)



CC 29-6 (Organometallic and Organometalloidal Compounds)

IT 130891-57-5P 130891-58-6P 130891-59-7P
130891-60-0P 130891-61-1P 130891-63-3P 130891-64-4P
130891-65-5P 130891-66-6P 130891-67-7P 130891-68-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L7 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN

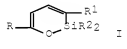
ACCESSION NUMBER: 1981:405934 HCAPLUS Full-text

DOCUMENT NUMBER: 95:5934

TITLE: Silicon-containing heterocyclic compounds. XXXVIII. Mass-spectrometric study of 1-oxa-2-silacyclohexa-3,5-diene derivatives

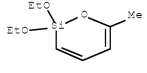
AUTHOR(S): Bochkarev, V. N.; Polivanov, A. N.; Krasnova, T. L.; Labartkava, M. O.; Silkina, N. N.;

Chernyshev, E. A.
CORPORATE SOURCE: Gos. Nauchno-Issled. Inst. Khim. Tekhnol. Elementoorg. Soedin., Moscow, USSR
SOURCE: Zhurnal Obshchei Khimii (1981), 51(1), 119-22
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



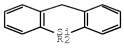
I

AB The mass spectral fragmentation paths of I (R = H, Me, Ph; R1 = H, Me; R2 = Cl, Me, OEt) depended strongly on the substituents. Rearrangement processes were found and interpreted.
IT 76470-24-1
RL: PRP (Properties)
(mass spectrum of)
RN 76470-24-1 HCAPLUS
CN 1-Oxa-2-silacyclohexa-3,5-diene, 2,2-diethoxy-6-methyl- (9CI) (CA INDEX NAME)



CC 22-2 (Physical Organic Chemistry)
IT 54905-28-1 67078-75-5 67608-54-2 69586-09-0 76470-24-1
77436-52-3 77436-53-4
RL: PRP (Properties)
(mass spectrum of)

L7 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:64674 HCAPLUS Full-text
DOCUMENT NUMBER: 94:64674
TITLE: Formation of pseudomolecular ions of compounds containing a silicon-carbon double bond under electron impact
AUTHOR(S): Bochkarev, V. N.; Polivanov, A. N.; Slyusarenko, T. F.; Bernadskii, A. A.
CORPORATE SOURCE: USSR
SOURCE: Zhurnal Obshchei Khimii (1980), 50(8), 1783-7
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



I

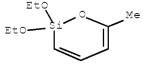
AB The mass spectra of several cyclic Si compds., e.g., I (R = Cl, Et, MeO, F) showed high-intensity peaks corresponding to species containing the Si:C group. Allylic and benzylic compds. also exhibited these peaks.

IT 76470-24-1

RL: PRP (Properties)
(mass spectrum of)

RN 76470-24-1 HCAPLUS

CN 1-Oxa-2-silacyclohexa-3,5-diene, 2,2-diethoxy-6-methyl- (9CI) (CA INDEX NAME)



CC 22-2 (Physical Organic Chemistry)

IT 107-37-9 701-35-9 711-53-5 770-10-5 872-46-8 999-94-0
1112-55-6 1745-72-8 2999-78-2 4142-85-2 13093-11-3
16054-12-9 18147-55-2 20151-87-5 28871-17-2 32306-76-6
34106-93-9 38948-58-2 51986-73-3 52023-18-4 54113-94-9
54321-30-1 57831-44-4 61667-33-2 67608-54-2 75722-33-7
76470-24-1 76470-25-2 76470-26-3

RL: PRP (Properties)
(mass spectrum of)

L7 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:180327 HCAPLUS Full-text

DOCUMENT NUMBER: 84:180327

ORIGINAL REFERENCE NO.: 84:29235a,29238a

TITLE: Copyrolysis of sym-tetramethoxydimethyldisilane and 2,5-dimethylfuran

AUTHOR(S): Childs, Michael E.; Weber, William P.

CORPORATE SOURCE: Dep. Chem., Univ. South. California, Los Angeles, CA, USA

SOURCE: Journal of Organic Chemistry (1976), 41(10), 1799-802
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

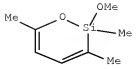
AB The reaction of methoxymethylsilylene (generated by pyrolysis of sym-tetramethoxydimethyldisilane) with 2,5-dimethylfuran yields 2-methoxy-2,3,6-trimethyl-1-oxa-2-silacyclohexa-3,5-diene and 2-methoxy-2,4,7-trimethyl-1,3-dioxa-2-silacycloheptа-4,6-diene.

IT 58449-10-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 58449-10-8 HCAPLUS

CN 1-Oxa-2-silacyclohexa-3,5-diene, 2-methoxy-2,3,6-trimethyl- (9CI) (CA INDEX NAME)



CC 29-6 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 27, 28
IT 58449-10-8P 58449-11-9P 58449-12-0P 58449-13-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

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